SHORT COMMUNICATION

Family Needs of Patients Admitted in Intensive Care Units, as Perceived by Family Members and Registered Nurses in Tertiary Care Hospitals of Karachi, Pakistan

Shahid Ahmed[1], Sayed Yousaf Shah[2] and Asghar Khan[3*]

[1]Jinnah Postgraduate Medical Centre, Karachi, Pakistan
[2]Lincoln University College, Petaling Jaya, Selangor Darul Ehsan, Malaysia
[3]Batkhela College of Nursing and Health Sciences, Batkhela, Malakand, Pakistan

Abstract

Admission into the Intensive Care Units of the patient is a crucial time not only for the patient but also for the family. The family is faced with various challenges. Healthcare professionals are required to understand their needs. The objective of the study was to identify and compare the family needs of patients admitted to intensive care units as perceived by family members and registered nurses. An analytical cross-sectional study was conducted at Ruth Pfau Civil Hospital and Dow University Hospital Karachi from December 2020 to February 2021. An adopted self-administered questionnaire of the Critical Care Family Need Inventory (CCFNI) was utilized for data collection. The tool consisted of 45 items of family needs in the form of a Likert scale having options rated from 01 to 04. The tool was divided into five subscales of Comfort, Information, Assurance, Support and Proximity. Frequencies and percentages were calculated for the categorical variables. Means and standard deviations were calculated for measuring the responses of the Likert scales. An Independent t-test was applied to compare the means of subscales. A total of 162 participants were included in the study. The total sample comprised 30 nurses and 132 family members. The most important need identified by the family members was to talk to the doctor every day (3.60±0.604) while the staff nurses identified to have a religious leader visit (3.90±0.305). The findings of the current study demonstrate that gap exists between the doctor and family members. The highest score for the dimension of comfort indicated that critical units lack the essential facilities.

Keywords: *CCFNI, family needs, family members, intensive care unit, registered nurse.*

INTRODUCTION

The intensive care unit (ICU) is known to be one of the high mortality areas and the situation deteriorates even further in low socioeconomic countries [1]. Therefore admission of a patient to the intensive care unit is regarded as a crisis for the patient as well as for the rest of the family [2]. The intensive care unit possesses a unique nature from other domains of health care as the family members communicate values and preferences on behalf of the ill patients who are unable to speak for themselves owing to the critical nature of their illness [3].

The previous literature has widely recognized that families play a crucial role in the patient's wellbeing, at the same time the negative ramifications of critical care on family members are adequately reported [4]. Many families have reported the time spent in ICU as challenging and uncertain regarding the critical care patient's condition, treatment and prognosis [5]. Similarly, the research also suggests that families are extensively disturbed by the feelings to lose loved ones, deterioration of the family structure and the concern of the unpredictable future [6]. Consequently, the families' lives turn disorganized and disturbed when their members are admitted into critical care units [7]. The prior research has demonstrated that if the needs of the family are adequately addressed they are empowered to support their admitted relative in intensive care units [8]. Additionally, addressing the needs of the family members results in reducing anxiety, boast family confidence in the health care system and ultimately leads to improved outcomes for the patient [9]. Furthermore, multiple challenges are confronted by the health care worker when providing care to both the patients and family in critical care [10]. Most critical care nurses are largely challenged to deliver patient-centered care owing to the burden of patient flow and budgetary constraints [11].

The research has found that failure to understand the needs of the customer, regarding the services being provided results in a lack of satisfaction and poses risk to the effectiveness of health care services [12]. Moreover, highlighting the central needs of the family members will help the hospital management and staff to plan policies and interventions to improve critical care outcomes. Additionally, the finding will contribute to aware the critical care nurses of the priority family needs which will upgrade them to provide specialized care to patients. Therefore, the objective of this study was to identify and compare the family needs of the patients admitted into intensive care units as perceived by family members and registered nurses.

*Corresponding author: Asghar Khan, Batkhela College of Nursing and Health Sciences, Batkhela, Malakand, Pakistan; Email: asghar802@gmail.com
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Table 1: Comparison of subscales among family members & nurses.

Sub-Scale	Participants	Mean ± SD	Min	Max	95% CI		P-value
					Lower	Upper	
Support	Family Members	3.32±0.334	2.08	4.00	-.14721	.12413	0.269
	Registered Nurses	3.31±0.363	2.46	3.85			
Information	Family Members	3.33±0.359	2.13	3.88	-.13294	.15583	0.783
	Registered Nurses	3.34±0.369	2.63	4.00			
Proximity	Family Members	3.32±0.345	2.33	4.00	-.55301	-.28664	0.263
	Registered Nurses	2.90±0 .272	2.33	3.67			
Assurance	Family Members	3.32±0.373	2.25	4.00	.06782	.36135	0.414
	Registered Nurses	3.53± 0.338	2.88	4.00			
Comfort	Family Members	3.39±0.321	2.50	4.00	-.13885	.20400	0.007
	Registered Nurses	3.42±0.436	2.50	4.00			

An independent t-test was applied. A P-value of 0.05 is considered significant.

METHODOLOGY

This analytical cross-sectional study was carried out at Ruth Pfau Civil Hospital Karachi and Dow University Hospital Karachi from December 2020 to February 2021. The approval for the study was granted by the Institutional Review Committee (IRC) of the Dow Institute of Nursing and Midwifery (DIONAM/MSN/2020/18/415). Moreover, written informed consents were obtained from all the participants after elaborating explicitly the purpose of the study. The participants of the study included all registered nurses working in Critical Care Units and family members of patients admitted to Intensive Care Units. All registered nurses who had 3 months of experience in ICU were included and those who had chronic medical problems were excluded from the study. All the participants were included in the study through a convenient sampling method. The family members aged 18 years and above were included in the study and family members of DNR patients were excluded from the study.

An adopted self-administered questionnaire of the Critical Care Family Need Inventory (CCFNI) with reliability of α = 0.92 was used for data collection, initially designed by Molter and later revised by Leske [13]. The questionnaire consisted of two sections, section “A “ composed of the demographic data age, gender and education while section “B” contained 45 items on the Likert scale. The Likert scale options are rated from 01 to 04 according to their importance: 1= not important, 2= slightly important, 3= important, 4= very important. Family needs of the tools have been summarized as falling into five categories or subscales; information (9 items, total score= 36), assurance (7 items, toral Score= 28), support (14 items, total score= 56), Comfort (6 items, total score= 24) and proximity (9 items, total score= 36) [14]. The tool was translated into Urdu for the family members. A higher score increases the importance of the need.

Statistical Package for Social Sciences (SPSS) version 21 was used for data analysis. Frequencies and percentages were calculated for demographic data of gender, level of education, relationship with the patients, years of experience of registered nurses, and responses to the Likert scale. Mean and standard deviation was calculated for the continuous variable of age and the sub-scales of CCFNI. Normality assumption was checked with the Shapiro-Wilk test. Furthermore, an independent t-test was applied to the means of sub-scales among the categorical responses of registered nurses and family members. A P-value of <0.05 was considered significant.

RESULTS

A total of 162 participants, comprised of registered nurses (n=30) and family members (n=132) were included in the study. The mean age for nurses and family members was 33.17±4.81 years and 39.64±6.95 years respectively. Of registered nurses, 19 (63.3%) were male and 11 (36.7%) were female. Of family members, males were 84 (63.6%) and females were 48 (36.4%). Of the total family members, 93 (70.5%) had secondary education, 38 (28.8%) had college education 1 (0.8%) was postgraduate. Of the nurses, 15 (50%) had 3 years of Nursing diploma while 15 (50%) graduated in nursing. The majority of staff nurses 9 (30%) had 4 to 6 years of experience, 8 (26.6%) had 1-3 years of experience, 5 (16.6%) had 7-10 years of experience, 6 (20%) had 11-13 years of experience, 2 (6.6%) had the experience of more than 17 years.

Table **1** shows the comparison of mean scores on different sub-scales of CCFNI among family members and nurses. The highest score of mean has been given to the subscale of comfort (3.42±0.436) while the lowest mean was obtained by the subscale of Proximity (2.90±0.272) by the nurses. Among the family members, the highest mean was 3.39±0.321 while the lowest mean score was 3.32±0.334 for support and 3.32±0.345 for proximity. The mean score for comfort need was significantly higher (P= 0.007) for registered nurses than family members. No significant association was observed for the other four subscales of CCFNI.

“To talk to the doctor daily” is the most important family need as perceived by the family members while the least important family need among the top 10 is “to feel there is hope”. The top 10 needs perceived by the family members are shown in Table **2**.

Table 2: List of top ten most important family needs as perceived by family members (n=132).

Family Need Statement	Subscales	Mean ± SD
To talk doctor every day	Information	3.60±0.604
To know the expected outcome	Assurance	3.58±0.752
To talk about feelings about what has happened	Support	3.55±0.691
To have a specific person to call at the hospital when unable to visit	Information	3.52±0.531
To have good food available in the ward	Comfort	3.52±0.636
To have an explanation of the environment before going into the critical care unit for the first time	Comfort	3.49±0.648
To have a bathroom near the waiting room	Comfort	3.47±.683
To have a telephone near the waiting room	Comfort	3.46±0.598
To feel accepted by hospital staff	Comfort	3.45±0.646
To feel there is hope	Assurance	3.44±0.702

Table 3: List of top ten most important family needs as perceived by registered nurses (n=30).

Family Need Statements	Subscales	Mean ± SD
To have a pastor visit	Support	3.90±0.305
To know the expected outcome	Assurance	3.87±0.346
To have someone help with a financial problem	Support	3.87±0.346
To feel accepted by hospital staff	Comfort	3.83±0.379
To know specific facts concerning the patient's progress	Assurance	3.83±0.379
To have a telephone near the waiting room	Comfort	3.80±0.484
To talk doctor every day	Information	3.77±0.504
To feel that the hospital personal care about the patient	Assurance	3.77±0.626
To talk about the possibility of the patient's death	Support	3.73±0.640
To have a bathroom near the waiting room	Comfort	3.73±0.583
To have a waiting room near the patient	Comfort	3.73±0.691

The religious leader visit has been described as the most important need by the registered nurses while having a waiting room is the least important need among the top 10 needs of the family (**Table 3**).

DISCUSSION

This study was conducted to identify the family needs of the patients admitted to ICU as perceived by registered nurses working in the critical areas of the hospital and the family members. The patients admitted into critical care units usually have poor health and it poses large scales challenges to the family. The concern to know the expected outcome was ranked the second highest score by both the nurses and the family members. The finding is consistent with the prior study where the information on the expected outcome had been ranked higher by the doctors [15]. In contrast to the present finding, the earlier study demonstrated this need as the 8th priority needs by the nurses and the 10th by the family members [1]. The finding in our study is reflective of the miscommunication between the family members and the health care professionals as the family is not communicated about the outcome of the treatment and the patient's critical condition. Adequate and timely communication pertaining to the expected outcome may empower the family for readiness concerning future events and planning.

The need to talk to the doctor every day was ranked as the highest priority need by the family members while it was the 7th important need by critical care nurses. Similarly, a study conducted on the family satisfaction of the intensive care units in Norway suggested that the participants were least satisfied with the frequency of the conversation with the physicians [5]. Contrarily, the need to talk to a doctor every day was ranked as the 10th most important need by family members and the 6th important need by nurses [16]. No literature identifies where this family need had been ranked in the top 10 family needs. The finding of the current study reveals a gap between the doctor and family members or the family members unjustifiably expect much from the doctors which have elicited this response from them. The possibility exists that the health care professionals may exclusively focus on the patient's vital needs in the initial time of admission which may negatively affect the interaction with family. This aspect of the doctor and family interaction needs further study for clarification. The highest priority need identified by nurses was awarded to the visit of religious leaders which is not in agreement with previous literature where it has been counted as the 10th least important family need [17]. The finding of the current study showed that nurses need religious support to care for the patients admitted to critical care.

The findings show that the most important needs perceived by our participants are related to the dimension of "comfort". In contrast to the finding of the present study, the previous studies have reported the subscale of comfort to be ranked as the lowest score [13, 18]. Moreover, researchers suggest that the needs perceived as most important by family members of critical care patients are related to the dimension of "assurance" while the lowest family needs reported

belong to comfort [13, 17, 19]. Another study research revealed that the fundamental need that was ranked higher was assurance/proximity [20]. It can be inferred from the finding that our critical care areas are deficient in facilities for the patient and families.

It would have added additional strength to the findings of the study if there was an equal proportion of the population among critical care nurses and family members of the patients in the sample.

CONCLUSION

The study concludes that the principal needs of the family members belong to the dimension of Information and Assurance while those of registered nurses revealed the dimension of Support and Assurance. These findings reveal that critical units of our hospital need to enhance facilities and improve the interaction of health care professionals and the family.

CONSENT FOR PUBLICATION

Written informed consent was obtained from all the participants before data collection. The purpose of the study and the publication of the findings have been explained to them.

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CONFLICT OF INTEREST

There was no conflict of interest among the authors.

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